OCCURRENCE OF THE BRACKISH WATER ASELLOTE ISOPOD MUNNA (UROMUNNA) REYNOLDSI IN TEXAS

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ABSTRACT The asellote isopod Munna (Uromunna) reynoldsi Frankenberg and Menzies, previously known from coastal swamps at Sapelo Island, Georgia, is reported from Texas. Several specimens were collected in grab samples from Fence Lake, a small brackish marsh lake (salinity 0 to 2.7 ppt) in Sca Rim State Park, and in a nearby coastal marsh (salinity 4.4 ppt). The present records indicate that the species is a brackish water form.

INTRODUCTION

The genus Munna Kryer (suborder Aselloca, family Munnidae) includes nearly 70 species of minute marine and brackish water isopods. The adequately described species are grouped into four subgenera (Fresi and Mazzella 1974). Seven species, all shallow-water forms, are assigned to the subgenus Uromunna, including the two temperate western North Atlantic species Munna (Uromunna) hayesi Robertson, from Port Aransas, Texas, (Robertson, in press), and Munna

(U.) reynoldsi Frankenberg and Menzies, from salt marshes (among oak leaves) at Sapelo Island, Georgia, (Frankenberg and Menzies 1966). This report extends the range of Munna (U.) reynoldsi to Texas.

MATERIALS AND METHODS

M. (U.) reynoldsi was collected at two localities on the upper Texas coast approximately 10 to 13 km west of Sabine Pass (Figure 1). Twenty specimens were obtained on

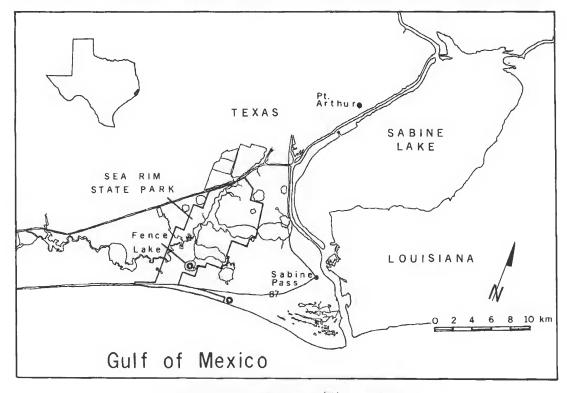


Figure 1. Collection sites (o) of Munna (U.) reynoldsi in Texas.

November 15, 1975 in Ponar grab samples in Fence Lake, a small brackish marsh lake north of Highway 87 in Sea Rim State Park. From November 1974 to November 1975 depth averaged less than 1 m; sediments were mostly soft mud, with much plant detritus near the margins; water temperature ranged from 13.8° to 34°C; salinity ranged from 0 to 2.7 ppt; and dissolved oxygen ranged from 5 to 11.3 ppm. Two additional individuals were collected on October 22, 1976 in a coastal marsh in Sea Rim Estates south of Highway 87, approximately 400 m from the Gulf beach. Because this marsh is elevated about 1 to 1.5 m above the level of the beach foreshore, it is flooded by seawater only during storm tides. The isopods were obtained in miscellaneous samples of plant detritus in water 10 to 20 cm deep. Temperature was 16.5°C, and salinity was 4.4 ppt.

RESULTS AND DISCUSSION

Stations were located throughout Fence Lake, but the species has been collected only in margin samples among plant detritus. Abundance, based on five samples which yielded specimens, ranged from 19 to 115 individuals/m². Major components of the associated macrobenthos included the polychaetes Hypaniola florida (Hartman), Laeonereis culveri (Webster), and Boccardia sp.; the oligochaetes Limnodrilus sp., Aulodrilus pigueti Kowalewski, and Peloscolex sp.; the amphipods Corophium louisianum Shoemaker and Grandidierella bonnieroides Stephenson; the isopod Edotea cf. montosa (Stimpson); and the chironomid larvae Chironomus sp. and Endochironomus sp.

The present data indicate that M. (U.) reynoldsi, like M. (U.) schauinslandi (Sars 1905) from Chatham Island and South Chile, is a brackish water species.

LITERATURE CITED

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